

Notice of Allowability

Application No.

10/817,084

Examiner

Debra Wolfe

Applicant(s)

HAUGER, ANDREAS

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on August 9, 2006.
2. ☒ The allowed claim(s) is/are 2-5, 11-20, 22 and 23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 08/09/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Lowell A. Carson
Primary Examiner



NOTICE OF ALLOWABILITY

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Please cancel withdrawn claims 6-9 and 24-29 in response to the Restriction requirement filed April 13, 2006.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance.

1. It is the opinion of the examiner that the art of record (considered as a whole) neither anticipates nor renders obvious "during the course of the rolling process controlling the movement of one of the rolls of the strip storage assembly to distort the 'S', such that the length of the metal strip is varied, wherein the rolls at least partially overlap in a vertical projection" in combination with the rest of the claimed limitations set forth in independent claims 2, 11, 13 and 14.

Further searching by the examiner yielded additional prior art as follows:

2. Brockes et al (US PUB # 2004/0177666) discloses a cold rolling mill for rolling a metal strip (8) having a first reeling device (9), a rolling stand (1) comprising of two working rolls (13,14) with an adjustable roll gap, a second reeling device (10), a first (6,17) and second (7,17) strip storage assembly comprising a plurality of rolls wherein the first strip storage assembly



(6,17) is located between the first reeling device (9) and the rolling stand (1) and the second strip storage assembly (7,17) is located between the rolling stand (1) and the second reeling device (10). Brockes et al further discloses each strip storage assembly (6,17 and 7,17) being a double-roll assembly wherein the strip is wrapped in an S-like way around two rolls (6,17; 7,17) whose axes are arranged at different levels and wherein the first roll (6,7) tensions the strip (8) between the double roll assembly and the rolling stand (1) and the second roll (17) tensions the strip (8) between the double roll assembly and the respective reeling device (9,10). Through the movement of movable rolls (6,7) the length of the piece of strip between the second roll (17) and the first roll (6,7) can be varied during the rolling process. Brockes et al also discloses the use of a lower roll (6,7) being pivotable from an operation position to an introduction position with the strip running off from the underside of the first reeling device (9) and running in on the underside of the second reeling device (10). With regards to claim 1 Brockes et al discloses the process of guiding the metal strip (8) over the strip storage assemblies (6,17; 7,17) in the form of an "S" and controlling the movement of rolls (6,7) to distort the "S".

Vydrin et al (U.S. Patent # 3,823,593) discloses a method of rolling metal sheet between driven rolls of a rolling mill wherein the rolling mill has a first reeling device (15), a rolling stand (8) housing two work rolls (9,10) whose roll gap width is controllable through a presser means [See col. 5 lines 56-60], a second reeling device (14), a first (16) and second (17) strip storage assembly comprising of a double-roll assembly wherein the first strip storage assembly (16) is located between the first reeling device (15) and the rolling stand (8) and the second strip storage assembly (17) is located between the rolling stand (8) and the second reeling device (14). The strip is wrapped in an S-like way around the two rolls whose axes are arranged at different



levels wherein the first roll tensions the strip between the double roll assembly and the rolling stand (8) and the second roll tensions the strip between the double roll assembly and the respective reeling device.

3. However the above cited prior art fails to disclose at least one of the rolls of the strip storage assembly moving during the course of the rolling process such that the rolls at least partially overlap in a vertical projection and the length of the metal strip is varied. Therefore, it is concluded that claims 2, 11, 13 and 14 of the present invention are allowable subject matter over the prior art. Claims 2-5, 11-20, 22 and 23 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Wolfe whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 6am - 3:30pm with alternating Friday 6am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Lowell A. Larson", is positioned above the printed name.

Lowell A. Larson
Primary Examiner

Debra Wolfe
Examiner
Art Unit 3725